

CLAIMS:

1. A method for determining the level of an analyte in the blood of an individual comprising:
- 5 (i) obtaining a sample from said individual, said sample being a non-blood sample but containing blood components;
- (ii) determining the volume of blood in the obtained sample by measuring the level of a blood component in said samples;
- (iii) determining the amount of said analyte in the sample or in the blood cells present in said non-blood sample; and
- (iv) calculating the level of said analyte in the blood of the tested individual based on the measurements in (iii) and (iv).
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2. The method of Claim 1, wherein said blood component is hemoglobin.
- 15 3. The method of Claims 1 or 2, wherein said analyte is glucose.
4. A method according to Claim 1, wherein said non-blood sample is a sample of hair obtained from said individual, the method comprising:
- (i) obtaining a sample of hair from said individual;
- (ii) determining the amount of blood or interstitial fluid in said obtained sample and if necessary, correcting variations between different hair samples;
- 20 (iii) determining the level or concentration of said analyte in said blood or interstitial fluid and
- (iv) calculating the level of said analyte in the blood of the tested individual based on the measurements in (ii) and (iii).
- 25 5. A method according to claim 4 wherein before stage (ii) said blood or interstitial fluid are first extracted from the hair follicle of said obtained hair.
6. A kit for determining the level of an analyte in the blood of a tested individual comprising:
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- (i) means for obtaining a sample from said individual, said sample being a non-blood sample but containing blood components;
- (ii) means for measuring the level of a blood component in the sample;
- (iii) means for measuring the level of the tested analyte in the obtained sample;
- (iv) means for calculating the level of the tested analyte in the blood of the tested individual on the basis of the measurements obtained in (ii) and (iii) above.

7. A kit according to Claim 6, further comprising means for separating said red blood cells from the sample.

8. A kit according to Claims 6 or 7, further comprising means for lysing said red blood cells.

9. A kit according to Claim 6, further comprising a test strip incorporating reagents or structures necessary to carry out the measurement of the tested analyte and blood component and a instrument into which the test strip can be inserted into or to which the test strip may be connected; said instrument capable of detecting and analyzing a signal emitted by said test strips and optionally translating said signals into prevalent units..

10. A kit according to Claim 6, wherein the obtained body sample is a hair sample, said kit comprises the following:

- (i) hair removal means;
- (ii) a suitable diluent in which the blood or interstitial fluid from the obtained hair is collected;
- (iii) means for the determination of the level of a blood component in the blood or interstitial fluid specimen;
- (iv) means for determination of the level of said analyte in the blood or interstitial fluid specimen; and
- (v) means for calculating the level of the tested analyte in the blood of the tested individual on the basis of the measurements obtained in (iii) and (iv) above.

11. A kit according to Claims 6-10, wherein the tested analyte is glucose.

12. A kit according to Claim 11, further comprising a metabolic inhibitor capable of preventing glucose utilization by living cells present in said sample.

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